

## CLAIMS

I Claim:

## 1. A hydraulic stroke measuring system, comprising

a measurement unit attachable to a cylinder shaft of a hydraulic cylinder,

7 wherein said measurement unit measures an extended position of a cylinder shaft; and

8 a display unit with a plurality of display lights in communication with said

9 measurement unit, wherein said display lights indicate an extended position of a

10 cylinder shaft.

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13        2. The hydraulic stroke measuring system of Claim 1, including an indicia  
14 adjacent each of said display lights indicating a position measurement.

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17       3. The hydraulic stroke measuring system of Claim 1, wherein said  
18 measurement unit is comprised of:

19 a housing unit having a tubular structure;

20 a plurality of contact members attached within said housing unit, wherein said  
21 contact members are electrically connected to said display lights;

22 a measurement shaft slidably extending from within said housing unit and  
23 attachable to a cylinder shaft of a hydraulic cylinder; and

24 a main contact attached to said measurement shaft that engages one or more of  
25 said contact members based upon a position of said measurement shaft

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3       5. The hydraulic stroke measuring system of Claim 3, wherein said contact  
4 members are aligned in a row.

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7       6. The hydraulic stroke measuring system of Claim 5, wherein said contact  
8 members are separated equidistantly.

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11       7. The hydraulic stroke measuring system of Claim 3, wherein said main  
12 contact is sufficient in length to engage at least two of said contact members  
13 simultaneously.

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16       8. The hydraulic stroke measuring system of Claim 3, including a bias member  
17 attached to said measurement shaft and applying a bias force to said main contact  
18 towards said contact members.

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21       9. The hydraulic stroke measuring system of Claim 3, wherein said  
22 measurement shaft is attachable to said cylinder shaft by a shaft bracket.

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25       10. The hydraulic stroke measuring system of Claim 3, wherein said main  
26 contact is attached to an inner end of said measurement shaft.

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29       11. A hydraulic stroke measuring system, comprising:

1           a measurement unit attached to a cylinder shaft of a hydraulic cylinder by a  
2 housing bracket, wherein said measurement unit measures an extended position of said  
3 cylinder shaft; and

4           a display unit with a plurality of display lights in communication with said  
5 measurement unit, wherein said display lights indicate an extended position of said  
6 cylinder shaft.

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9           12. The hydraulic stroke measuring system of Claim 11, including an indicia  
10 adjacent each of said display lights indicating a position measurement.

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13           13. The hydraulic stroke measuring system of Claim 11, wherein said  
14 measurement unit is comprised of:

15           a housing unit having a tubular structure;

16           a plurality of contact members attached within said housing unit, wherein said  
17 contact members are electrically connected to said display lights;

18           a measurement shaft slidably extending from within said housing unit and  
19 attachable to said cylinder shaft of said hydraulic cylinder; and

20           a main contact attached to an inner end of said measurement shaft that engages  
21 one or more of said contact members based upon a position of said measurement shaft.

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24           14. The hydraulic stroke measuring system of Claim 13, wherein said main  
25 contact and said display lights are electrically connected to a power source.

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28           15. The hydraulic stroke measuring system of Claim 13, wherein said contact  
29 members are aligned in a row.

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3       16. The hydraulic stroke measuring system of Claim 15, wherein said contact  
4 members are separated equidistantly.

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7       17. The hydraulic stroke measuring system of Claim 13, wherein said main  
8 contact is sufficient in length to engage at least two of said contact members  
9 simultaneously.

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12       18. The hydraulic stroke measuring system of Claim 13, including a bias  
13 member attached to said measurement shaft and applying a bias force to said main  
14 contact towards said contact members.

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17       19. The hydraulic stroke measuring system of Claim 13, wherein said  
18 measurement shaft is attachable to said cylinder shaft by a shaft bracket.

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21       20. A hydraulic stroke measuring system, comprising:

22           a measurement unit attached to a cylinder shaft of a hydraulic cylinder by a  
23 housing bracket, wherein said measurement unit measures an extended position of said  
24 cylinder shaft;

25           a display unit with a plurality of display lights in communication with said  
26 measurement unit, wherein said display lights indicate an extended position of said  
27 cylinder shaft;

28           an indicia adjacent each of said display lights indicating a position  
29 measurement;

1           wherein said measurement unit is comprised of:

2            a housing unit having a tubular structure;

3            a plurality of contact members attached within said housing unit,

4            wherein said contact members are electrically connected to said display lights;

5            a measurement shaft slidably extending from within said housing unit

6            and attachable to said cylinder shaft of said hydraulic cylinder;

7            a main contact attached to an inner end of said measurement shaft that

8            engages one or more of said contact members based upon a position of said

9            measurement shaft;

10           wherein said main contact and said display lights are electrically

11           connected to a power source;

12           wherein said contact members are aligned in a row and equidistantly

13           spaced;

14           wherein said main contact is sufficient in length to engage at least two

15           of said contact members simultaneously;

16           a bias member attached to said measurement shaft and applying a bias

17           force to said main contact towards said contact members;

18           wherein said measurement shaft is attachable to said cylinder shaft by a

19           shaft bracket.

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